

# Aspen Plus – Intermediate Process Modeling Essentials

21 – 25 December 2026  
Kuala Lumpur (Malaysia)

UK Training

# PARTNER

A photograph of chess pieces on a checkered board. In the foreground, a large gold king piece stands prominently. To its left is a smaller silver pawn. Further back and to the left is another silver pawn. The background features concentric circles, suggesting a target or focus.

## Aspen Plus – Intermediate Process Modeling Essentials

**Ref:** 3255554\_344691 **Date:** 21 – 25 December 2026 **Location:** Kuala Lumpur (Malaysia) **Fees:** 4900 GBP

### Introduction

The Aspen Plus - Intermediate Process Modeling Essentials course is a focused three-day training program designed to enhance participants' practical skills in process modeling within a compact and efficient timeframe. The course bridges the gap between basic process modeling and advanced simulation techniques, concentrating on intermediate-level applications commonly used in chemical engineering practice.

Aspen Plus is a widely recognized process simulation software used to model, simulate, and optimize chemical processes. This course provides participants with a solid intermediate understanding of Aspen Plus capabilities, enabling them to build, analyze, and optimize more complex process models. Through a combination of conceptual explanations, hands-on exercises, and applied examples, participants gain practical skills in intermediate digital process modeling and performance improvement.

### Course Objectives

By the end of this course, participants will be able to:

- Understand what Aspen Plus is and how it supports process modeling in chemical engineering.
- Navigate the Aspen Plus interface and efficiently develop intermediate-level process models.
- Model and simulate key unit operations, including reactors, distillation columns, and heat exchangers.
- Apply intermediate modeling techniques for heat integration and energy optimization.
- Perform basic process optimization and sensitivity analysis.
- Identify and resolve common issues encountered in intermediate Aspen Plus simulations.
- Apply Aspen Plus models to real-world engineering problems to improve process performance.

### Course Outlines

#### Day 1: Aspen Plus Fundamentals and Intermediate Process Modeling

- Overview of Aspen Plus and its role in chemical process modeling.
- Understanding intermediate process modeling concepts and applications.
- Navigating the Aspen Plus user interface, tools, and workflows.
- Building and configuring intermediate-level process models.
- Modeling best practices and workflow management.

#### Day 2: Unit Operations Modeling and Heat Integration

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A graphic of a chessboard with several chess pieces (king, queen, rook, knight, and pawns) in gold and silver, set against a background of concentric circles.

- Modeling essential unit operations, including:
  - Reactors.
  - Distillation columns.
  - Heat exchangers.
- Configuring and customizing unit operation models.
- Introduction to heat integration concepts and energy optimization strategies.
- Designing heat exchanger networks and improving energy efficiency using Aspen Plus.
- Troubleshooting common unit operation modeling challenges.

### Day 3: Process Optimization, Sensitivity Analysis, and Applications

- Introduction to process optimization techniques in Aspen Plus.
- Setting up optimization cases and evaluating simulation outcomes.
- Conducting sensitivity analysis to assess the impact of key process parameters.
- Applying intermediate process models to real-world engineering scenarios.
- Practical case studies demonstrating intermediate digital process modeling.

### Why Attend This Course: Wins & Losses!

- Gain a strong intermediate understanding of Aspen Plus and its practical applications.
- Develop hands-on skills to model and analyze complex chemical processes efficiently.
- Learn essential techniques for heat integration, energy optimization, and sensitivity analysis.
- Build confidence in applying intermediate models to real engineering challenges.
- Receive expert guidance on effective and efficient Aspen Plus usage.

### Conclusion

The Aspen Plus - Intermediate Process Modeling Essentials course delivers a focused and practical learning experience for professionals seeking to enhance their process simulation capabilities. Designed for chemical engineers, researchers, and technical specialists, the course provides high-impact training in intermediate Aspen Plus modeling techniques.

**By mastering essential intermediate tools and applying them to practical scenarios, participants will be better equipped to simulate, troubleshoot, and optimize chemical processes in real-world engineering and industrial environments.**

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A graphic of a chessboard with several chess pieces (a king, a queen, and a pawn) positioned on it. The board is white and black, and the pieces are gold and silver. The text 'UK Training PARTNER' is overlaid on the board.